

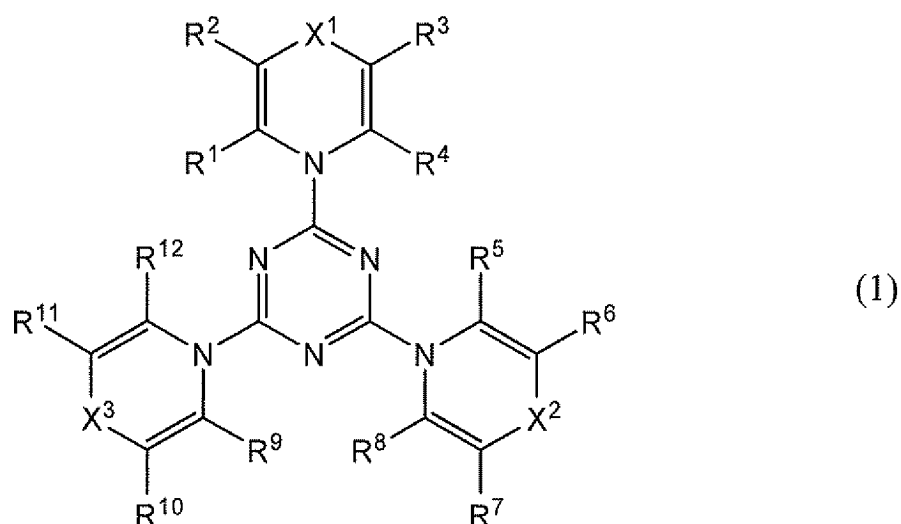
IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A light emitting element comprising:

a pair of electrodes, and

a layer between the pair of electrodes, the layer containing ~~[[and]]~~ both a metal oxide and a triazine derivative represented by a general formula (1),



wherein:

~~in the general formula (1); R¹ to R¹² are individually independent, or [[any]] at least one of R¹ and R², R³ and R⁴, R⁵ and R⁶, R⁷ and R⁸, R⁹ and R¹⁰, and R¹¹ and R¹² is bonded to form a ring[[,]] selected from an aromatic ring, a heterocycle, and an alicycle which are unsubstituted or have an alkyl group having 1 to 6 carbon atoms; and~~

when R¹ to R¹² are ~~individually~~ independent, R¹ to R¹² are individually any one of hydrogen, an alkyl group having 1 to 6 carbon atoms, an alkoxy group having 1 to 6 carbon atoms, a halogen group, an acyl group having 1 to 6 carbon atoms, an alkoxycarbonyl group having 1 to 6 carbon atoms, an aryl group having 6 to 30 carbon atoms, ~~preferably 6 to 14 carbon atoms~~, and a heteroaromatic group having 2 to 18

carbon atoms, and preferably 2 to 14 carbon atoms, the heteroaromatic group have a monocyclic structure of a 5-membered ring, a monocyclic structure of a 6-membered ring, a polycyclic structure containing any one of a 5-membered ring and a 6-membered ring, or a polycyclic structure containing both of a 5-membered ring and a 6-membered ring, and contains any one atom of nitrogen, oxide, and sulfur,

when any one of R^1 and R^2 , R^3 and R^4 , R^5 and R^6 , R^7 and R^8 , R^9 and R^{10} , and R^{11} and R^{12} is bonded to form a ring, the ring is any one of an aromatic ring, a heterocycle and an alicycle,

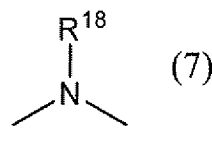
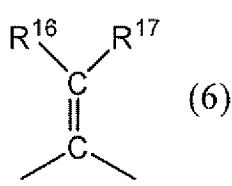
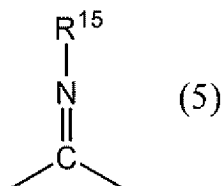
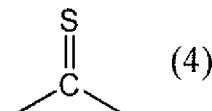
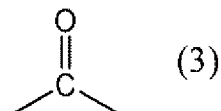
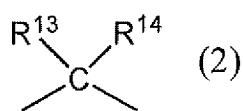
a bond of R^1 and R^2 , a bond of R^3 and R^4 , a bond of R^5 and R^6 , a bond of R^7 and R^8 , a bond of R^9 and R^{10} , and a bond of R^{11} and R^{12} are individually independent, R^1 and R^2 is bonded to form any one of an aromatic ring, a heterocycle, and an alicycle, and R^3 to R^{12} is individually hydrogen or a substituent,

the aromatic ring is condensed with another aromatic ring,

the aromatic ring, the heterocycle, and the alicycle individually have a substituent such as an oxo group and an alkyl group having 1 to 6 carbon atoms, and

wherein:

X^1 , X^2 , and X^3 indicate individually any group of formulas (2) to (7)[[.]]



wherein, in the formula (2), R^{13} and R^{14} [[is]] are individually independent[[.]] or bonded to each other to form a ring, an alicycle having 3 to 10 carbon atoms;

when R^{13} and R^{14} are individually independent, R^{13} and R^{14} are individually any one of

selected from hydrogen, an alkyl group having 1 to 6 carbon atoms, an aryl group having 6 to 30 carbon atoms, preferably 6 to 14 carbon atoms, and a heteroaromatic group having 2 to 18 carbon atoms, preferably 2 to 10 carbon atoms; ;

in the formula (2), the aryl group and the heteroaromatic group individually have a substituent,

the heteroaromatic group have a monocyclic structure of a 5-membered ring or a 6-membered ring, a polycyclic structure containing any one or both of a 5-membered ring and a 6-membered ring, and contains any one atom of nitrogen, oxide, and sulfur, and

when R^{13} and R^{14} are bonded to form a ring, the ring is an alicycle having 3 to 10 carbon atoms, preferably 6 carbon atoms,

wherein, in the formula (5), R^{15} is any one of hydrogen, an unsubstituted aryl group having 6 to 30 carbon atoms, and an aryl group having 6 to 30 carbon atoms which is substituted by a substituent selected from an alkyl group having 1 to 6 carbon atom, an acyl group having 1 to 6 carbon atoms, a halogen group, preferably 6 to 14 carbon atoms, and a heteroaromatic group having 2 to 18 carbon atoms; , preferably 2 to 10 carbon atoms,

in the formula (5), the aryl group may have one or two or more of substituents such as an alkyl group having 1 to 6 carbon atoms, an acyl group having 1 to 6 carbon atoms, a halogen group, and an oxo group, or may be unsubstituted,

and the heteroaromatic group have a monocyclic structure of a 5-membered ring, a monocyclic structure of a 6-membered ring, a polycyclic structure containing any one of a 5-membered ring and a 6-membered ring, or a polycyclic structure containing both of a 5-membered ring and a 6-membered ring, and contains any one atom of nitrogen, oxide, and sulfur,

wherein in the formula (6), R^{16} and R^{17} are individually independent, and any one of selected from hydrogen, an unsubstituted aryl group having 6 to 30 carbon atoms, and an aryl group having 6 to 30 carbon atoms which is substituted by a substituent selected from an alkyl group having 1 to 6 carbon atoms, a

halogen group, an aryl group having 6 to 30 carbon atoms, a heteroaromatic group having 2 to 18 carbon atoms, preferably 2 to 10 carbon atoms, and a cyano group[[.]]; and

in the formula (6), the aryl group have one or more of substituents such as an alkyl group having 1 to 6 carbon atoms, a halogen group, and an aryl group having 6 to 30 carbon atoms, preferably 6 to 14 carbon atoms, or be unsubstituted, and

the heteroaromatic group ave a monocyclic structure of a 5-membered ring, a monocyclic structure of a 6-membered ring, a polycyclic structure containing any one of a 5-membered ring and a 6-membered ring, or a polycyclic structure containing both of a 5-membered ring and a 6-membered ring, and contains any one atom of nitrogen, oxide, and sulfur,

wherein, in the formula (7); R¹⁸ is any one of hydrogen, an alkyl group having 1 to 6 carbon atoms, an unsubstituted aryl group having 6 to 30 carbon atoms, preferably 6 to 14 carbon atoms, an aryl group having 6 to 30 carbon atoms which is substituted by a dialkylamino group, and a heteroaromatic group having 2 to 18 carbon atoms, preferably 2 to 10 carbon atoms,

in the formula (7), the aryl group ave a substituent such as a dialkylamino group, and

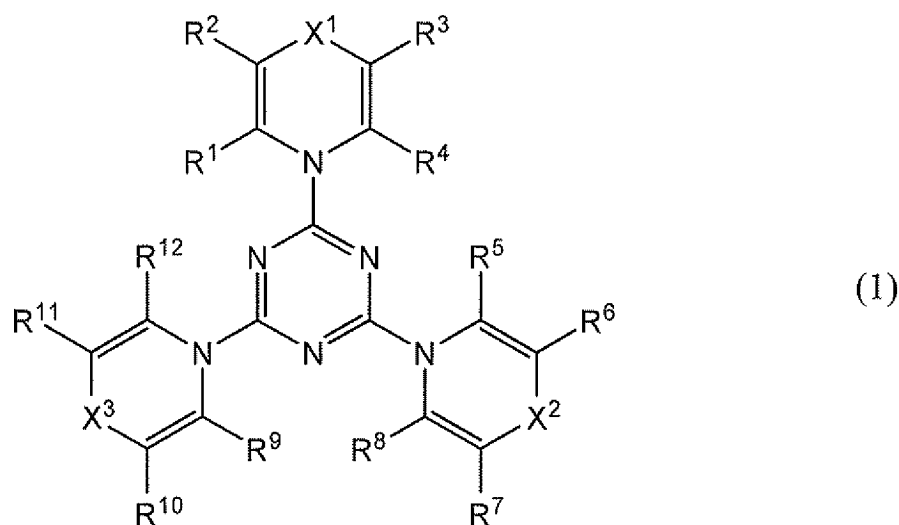
the heteroaromatic group have a monocyclic structure of a 5-membered ring, a monocyclic structure of a 6-membered ring, a polycyclic structure containing any one of a 5-membered ring and a 6-membered ring, or a polycyclic structure containing both of a 5-membered ring and a 6-membered ring, and contains any atom of nitrogen, oxide, and sulfur.

2. (Original) A light emitting element according to claim 1, wherein the metal oxide is a molybdenum oxide, a vanadium oxide, a titanium oxide, a lithium oxide, or a rhenium oxide.

3. (Original) A light emitting element according to claim 1, wherein the light emitting element includes a luminescent material having an emission wavelength in the bandwidth from 400 to 500 nm between

the pair of the electrodes.

4. (Currently Amended) A light emitting device comprising:
 a semiconductor layer[[]];
 a pair of electrodes provided over the semiconductor layer; and
 a first layer, a second layer, and a third layer provided in this order between the pair of the electrodes,
 wherein any one of the first layer to the third layer has a layer containing both a metal oxide and a triazine derivative represented by the general formula (1),



wherein;

~~in the general formula (1),~~ R¹ to R¹² are individually independent, or any at least one of R¹ and R², R³ and R⁴, R⁵ and R⁶, R⁷ and R⁸, R⁹ and R¹⁰, and R¹¹ and R¹² is bonded to form a ring[[]] selected from an aromatic ring, a heterocycle, and an alicycle which are unsubstituted or have an alkyl group having 1 to 6 carbon atoms; and

when R¹ to R¹² are ~~individually~~ independent, R¹ to R¹² are individually any one of hydrogen, an alkyl group having 1 to 6 carbon atoms, an alkoxy group having 1 to 6 carbon atoms, a halogen group, an acyl group having 1 to 6 carbon atoms, an alkoxycarbonyl group having 1 to 6 carbon atoms, an aryl group

having 6 to 30 carbon atoms, preferably 6 to 14 carbon atoms, and a heteroaromatic group having 2 to 18 carbon atoms, ~~and preferably 2 to 14 carbon atoms, the heteroaromatic group have a monocyclic structure of a 5-membered ring, a monocyclic structure of a 6-membered ring, a polycyclic structure containing any one of a 5-membered ring and a 6-membered ring, or a polycyclic structure containing both of a 5-membered ring and a 6-membered ring, and contains any one atom of nitrogen, oxide, and sulfur,~~

~~when any one of R¹ and R², R³ and R⁴, R⁵ and R⁶, R⁷ and R⁸, R⁹ and R¹⁰, and R¹¹ and R¹² is bonded to form a ring, the ring is any one of an aromatic ring, a heterocycle and an alicycle,~~

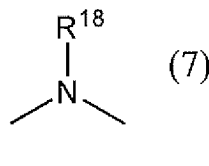
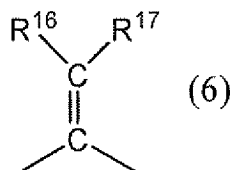
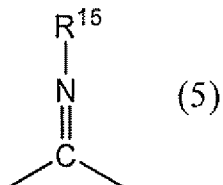
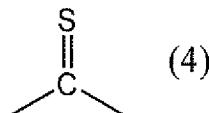
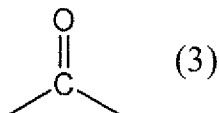
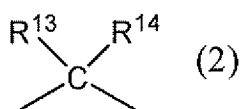
~~a bond of R¹ and R², a bond of R³ and R⁴, a bond of R⁵ and R⁶, a bond of R⁷ and R⁸, a bond of R⁹ and R¹⁰, and a bond of R¹¹ and R¹² are individually independent, R¹ and R² is bonded to form any one of an aromatic ring, a heterocycle, and an alicycle, and R³ to R¹² is individually hydrogen or a substituent,~~

~~the aromatic ring is condensed with another aromatic ring,~~

~~the aromatic ring, the heterocycle, and the alicycle individually have a substituent such as an exo group and an alkyl group having 1 to 6 carbon atoms, and~~

wherein:

X¹, X², and X³ indicate individually any group of formulas (2) to (7)[[,]]



~~wherein, in the formula (2),~~ R¹³ and R¹⁴ ~~[[is]] are individually independent[[,]] or bonded to each other to form a ring, an alicycle having 3 to 10 carbon atoms;~~

when R^{13} and R^{14} are individually independent, R^{13} and R^{14} are individually any one of selected from hydrogen, an alkyl group having 1 to 6 carbon atoms, an aryl group having 6 to 30 carbon atoms, preferably 6 to 14 carbon atoms, and a heteroaromatic group having 2 to 18 carbon atoms, preferably 2 to 10 carbon atoms;

~~in the formula (2), the aryl group and the heteroaromatic group individually have a substituent, the heteroaromatic group have a monocyclic structure of a 5-membered ring or a 6-membered ring, a polycyclic structure containing any one or both of a 5-membered ring and a 6-membered ring, and contains any one atom of nitrogen, oxide, and sulfur, and~~

~~when R^{13} and R^{14} are bonded to form a ring, the ring is an alicycle having 3 to 10 carbon atoms, preferably 6 carbon atoms,~~

~~wherein, in the formula (5), R^{15} is any one of hydrogen, an unsubstituted aryl group having 6 to 30 carbon atoms, and an aryl group having 6 to 30 carbon atoms which is substituted by a substituent selected from an alkyl group having 1 to 6 carbon atom, an acyl group having 1 to 6 carbon atoms, a halogen group, preferably 6 to 14 carbon atoms, and a heteroaromatic group having 2 to 18 carbon atoms; , preferably 2 to 10 carbon atoms,~~

~~in the formula (5), the aryl group may have one or two or more of substituents such as an alkyl group having 1 to 6 carbon atoms, an acyl group having 1 to 6 carbon atoms, a halogen group, and an oxo-group, or may be unsubstituted,~~

~~and the heteroaromatic group ave a monocyclic structure of a 5-membered ring, a monocyclic structure of a 6-membered ring, a polycyclic structure containing any one of a 5-membered ring and a 6-membered ring, or a polycyclic structure containing both of a 5-membered ring and a 6-membered ring, and contains any one atom of nitrogen, oxide, and sulfur,~~

~~wherein in the formula (6), R^{16} and R^{17} are individually independent, and any one of selected from hydrogen, an unsubstituted aryl group having 6 to 30 carbon atoms, and an aryl group having 6 to 30~~

carbon atoms which is substituted by a substituent selected from an alkyl group having 1 to 6 carbon atoms, a halogen group, an aryl group having 6 to 30 carbon atoms, a heteroaromatic group having 2 to 18 carbon atoms, preferably 2 to 10 carbon atoms, and a cyano group[[,]]; and

~~in the formula (6), the aryl group have one or more of substituents such as an alkyl group having 1 to 6 carbon atoms, a halogen group, and an aryl group having 6 to 30 carbon atoms, preferably 6 to 14 carbon atoms, or be unsubstituted, and~~

~~the heteroaromatic group ave a monocyclic structure of a 5-membered ring, a monocyclic structure of a 6-membered ring, a polycyclic structure containing any one of a 5-membered ring and a 6-membered ring, or a polycyclic structure containing both of a 5-membered ring and a 6-membered ring, and contains any one atom of nitrogen, oxide, and sulfur,~~

~~wherein, in the formula (7), R¹⁸ is any one of hydrogen, an alkyl group having 1 to 6 carbon atoms, an unsubstituted aryl group having 6 to 30 carbon atoms, preferably 6 to 14 carbon atoms, an aryl group having 6 to 30 carbon atoms which is substituted by a dialkylamino group, and a heteroaromatic group having 2 to 18 carbon atoms, preferably 2 to 10 carbon atoms,~~

~~in the formula (7), the aryl group ave a substituent such as a dialkylamino group, and~~

~~the heteroaromatic group have a monocyclic structure of a 5-membered ring, a monocyclic structure of a 6-membered ring, a polycyclic structure containing any one of a 5-membered ring and a 6-membered ring, or a polycyclic structure containing both of a 5-membered ring and a 6-membered ring, and contains any atom of nitrogen, oxide, and sulfur.~~

5. (Original) A light emitting device according to claim 4, wherein the metal oxide is a molybdenum oxide, a vanadium oxide, a titanium oxide, a lithium oxide, or a rhenium oxide.

6. (Original) A light emitting device according to claim 4, wherein the light emitting element includes

a luminescent material having an emission wavelength in the bandwidth from 400 to 500 nm between the pair of the electrodes.

7. (New) A light emitting element according to claim 1, wherein the layer containing the triazine derivative and the metal oxide is in contact with one of the pair of electrodes.

8. (New) A light emitting device according to claim 4, wherein the one of the first layer to the third layer is in contact with one of the pair of electrodes.